

**HEADQUARTERS THIRTIETH SPACE WING
VANDENBERG AIR FORCE BASE, CALIFORNIA**



**POLLUTION PREVENTION MANAGEMENT PLAN
(PPMP)
30 SW PLAN 32-7080**

Submitted to:

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HEADQUARTERS THIRTIETH SPACE WING
Vandenberg Air Force Base, CA 93437-5000
6 May 1996

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RECORD OF ANNUAL REVIEW

1. EACH HOLDER OF THIS PPMP IS RESPONSIBLE FOR CONDUCTING AN ANNUAL REVIEW AND FORWARDING SUGGESTED CHANGES/ COMMENTS OR NEGATIVE REPLY TO 30 CES/CEV, THE OFFICE OF PRIMARY RESPONSIBILITY. COMPLETE THIS LOG FOR EACH ANNUAL REVIEW.

Date Annual Review	Conducted By	Date 30 CES/CEV Notified
20 Mar 96	Tetra Tech, Inc.	6 May 96

2. **OTHER CIRCUMSTANCES WARRANTING PPMP REVIEW AND UPDATE:**

- a. When Opportunity Assessments indicate a change is warranted;
- b. When the PPMP fails, or proves to be ineffective for attaining goals;
- c. When pertinent Federal, State and local laws or regulations change; or when DoD or Air Force policy change; and/or
- d. Upon direction of the Environmental Protection Committee(EPC).

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RECORD OF CHANGES

AS THIS PPMP IS UPDATED OR CHANGED, EACH HOLDER OF THE PLAN WILL IMMEDIATELY POST THE CHANGES AND COMPLETE THE FOLLOWING LOG.

Change No.	Date Posted	Posted By
1	6 May 96	30 CES/CEV

1. The first release of this Pollution Prevention Management Plan (PPMP) was completed on 30 June 1995.
2. This PPMP was amended for the following reasons:
 - a. to include requirements pursuant to Senate Bill 14 (SB-14), Hazardous Waste Source Reduction Act of 1989;
 - b. to incorporate final provisions of the USAF Installation Pollution Prevention Guide;

- c. to incorporate 30 SW remote sites; and
- d. to include CY baseline data for each applicable AF P2 goal and successive reporting years data indicating progress towards each goal.

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EXECUTIVE SUMMARY

SECTION A. PURPOSE AND PROVISIONS. This Pollution Prevention Management Plan (PPMP) is the 30th Space Wing's primary document for the management of pollution prevention (P2) activities on the 98,000 acres of Vandenberg Air Force Base and the seven remote sites (Anderson Peak Optics Site, Santa Ynez Peak Optics Site, Pillar Point Satellite Tracking Station, Kaena Point Satellite Tracking Station, Wheeler Network Control Center, Ewa Beach High Frequency Transmitting Site, and Molokai High Frequency Receiving Site). Throughout this plan Vandenberg AFB and the remote sites may be collectively referred to as "Vandenberg". The PPMP references federal, state, local and Air Force documents which establish the mandatory compliance requirements. This PPMP has integrated the requirements of California SB-14/SB-1726 into the 30th Space Wing P2 goals. If there is a conflict between this PPMP and the regulations, regulatory requirements have precedence. This PPMP may direct 30th Space Wing management practices which are more stringent than the regulations. This PPMP is intended to assist process operators, technicians and managers in meeting 30th Space Wing P2 goals. The cooperative efforts of many organizations and individuals are required for effective implementation of the P2 program. This PPMP provides a management overview as well as management action plans (MAPs) for the successful execution of the P2 program.

SECTION B. ORGANIZATION. Chapter 1 sets the background for P2 activities and provides an overview of P2 regulatory and guidance documents. Chapter 2 lists program goals, objectives and strategy, and the structure for accomplishing P2 objectives. Chapter 3 outlines specific individual and organizational responsibilities. P2 program elements and implementation strategies are found in Chapters 4 and 5. Chapter 6 deals with the essence of the P2 program, opportunity assessment teams and recurring opportunity assessments. Chapter 7 presents information on funding for P2 initiatives. The MAPs used to support 30th Space Wing's evolving P2 program are found in Appendix A1. A listing of 30th Space Wing waste streams subject to SB-14/SB-1726 source reduction goals are identified by California Waste Codes in Appendix B1. As an aid to collecting pollution prevention data from organizations not participating in the Hazardous Materials Pharmacy, standardized data collection forms have been included in Appendices C1 and C2. Pollution prevention opportunity assessment worksheets are included in Appendix C3. Appendix D1 provides briefing charts for historical trends of targeted 30th Space Wing program elements. Appendix E1 provides a pollution prevention project validation

matrix to be used when developing the 30th Space Wing P2 budget. This PPMP is intended for daily use and is structured for easy update and revision.

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ACRONYMS AND DEFINITIONS

AAFES	Army Air Force Exchange Service
ACO	Contract Administration Officer
AF	Air Force
AFCEE	Air Force Center for Environmental Excellence
AFI	Air Force Instruction
AFQA	Air Force Quality Assurance
AFR	Air Force Regulation
AFSPC	Air Force Space Command
AFV	Alternatively Fueled Vehicle
AGE	Aerospace Ground Equipment
APCD	Air Pollution Control District
BEE	Bioenvironmental Engineer
BTU	British Thermal Unit
BX	Base Exchange
CA	California
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAL-EPA	California Environmental Protection Agency
CCR	California Code of Regulations
CEPRC	California Emergency Planning & Response Committee
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES	Civil Engineer Squadron
CFR	Code of Federal Regulations
COCESS	Contractor-operated Civil Engineer Supply System
COPARS	Contractor-operated Parts Supply
CP	Command Post
CWA	Clean Water Act
CY	Calendar Year
DBMA	Defense Business Maintenance Area
DBOF	Defense Business Operations Fund
DENIX	Defense Environmental Network Information Exchange
DHS	Department of Health Services

DLA	Defense Logistics Agency
DMR	Discharge Monitoring Report
DoD	Department of Defense
DOT	Department of Transportation
DRMO	Defense Reutilization Marketing Office
DSM	Demand Side Management
DRMS	Defense Reutilization and Marketing Service
DTSC	Department of Toxic Substances Control
DUERS	Defense Utility Energy Reporting System
ECAMP	Environmental Compliance Assessment and Management Program
ECIP	Energy Conservation Investment Program
ECMIS	Environmental Compliance Management Information System
EOD	Explosive Ordnance Disposal
EMCS	Energy Monitoring & Control System
EPA	Environmental Protection Agency
EPC	Environmental Protection Committee
EPCRA	Emergency Planning and Community Right-to-Know Act
EPP	Environmentally Preferred Products
ESPC	Energy Savings Performance Contracting
FEMP	Federal Energy Management Program
FFCA	Federal Facilities Compliance Act
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FY	Fiscal Year
GMP	Good Management Practices
GOCESS	Government-operated Civil Engineer Supply System
GSA	General Services Administration
HAZMART	Hazardous Material Pharmacy (Base Supply)
HAZMAT	Hazardous Material
HM	Hazardous Material
HMIS	Hazardous Materials Information System
HMTA	Hazardous Materials Transportation Act
HQ	Headquarters
HSF	Hypergolic Storage Facility
HSWA	Hazardous and Solid Waste Amendments
HW	Hazardous Waste
HWCL	Hazardous Waste Control Law
IEX	Issue Exception Code
IRP	Installation Restoration Program
ITP	Industrial Toxics Project
IWTP	Industrial Wastewater Treatment Plant

Kg	Kilogram
LDR	Land Disposal Restriction
LEPC	Local Emergency Planning Committees
MAP	Management Action Plan
MILSPECs	Military Specifications
MILSTDs	Military Standards
Misc	Miscellaneous
MOA/MOU	Memorandum of Agreement/Understanding
MSDS	Material Safety Data Sheet
MSW	Municipal Solid Waste
MWR	Morale, Welfare, and Recreation
NASA	National Aeronautics and Space Administration
NPDES	National Pollutant Discharge Elimination System
OCR	Office of Collateral Responsibility
ODC	Ozone Depleting Chemical
OLDS	Ozone Layer Depleting Substances
OPR	Office of Primary Responsibility
OSD	Office of the Secretary of Defense
OSHA	Occupational Safety and Health Administration (Act)
P2	Pollution Prevention
PBR	Permit By Rule
PCBs	Polychlorinated Biphenyls
PEP	Propellants, Explosives, Pyrotechnics
POL	Petroleum, Oil, and Lubricant
POM	Program Objective Memorandum
POTW	Publicly Owned Treatment Works
PPE	Personal Protective Equipment
ppm	Parts per Million
PPMP	Pollution Prevention Management Plan
PPOAT	Pollution Prevention Opportunities Assessment Team
QA	Quality Assurance
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantity
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBCAPCD	Santa Barbara County Air Pollution Control District

SES	Shared Energy Savings
SOP	Standard Operating Procedure
SPR	Spill Prevention and Response
SW	Solid Waste
TO	Technical Order
TOC	Total Organic Carbon
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, or Disposal Facility
TRI	Toxic Release Inventory
UEC	Unit Environmental Coordinator
USAF	United States Air Force
VAFB	Vandenberg Air Force Base
VSD	Variable Speed Drive
WAP	Waste Analysis Plan
WDR	Waste Discharge Requirements

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GLOSSARY

The Pollution Prevention (P2) Program is designed to prevent pollution by reducing or eliminating environmentally harmful discharges to the air, land, surface water, and ground water at the source. The standard definitions that apply to the Pollution Prevention Program are presented below:

Affirmative Procurement: Required by Resource Conservation and Recovery Act Section 6002 and Executive Order 12873. Federal agencies must establish programs to encourage purchases containing recycled materials. Affirmative procurement programs must establish preference for products containing recycled material, must include a promotion plan to place emphasis on buying recycled items, and must have procedures for obtaining and verifying estimates and certifications of recycled content.

Alternatives: Ways of reducing adverse effects of hazardous materials (HM). Alternatives, as applied to HM decision making, include but are not limited to such possibilities as substituting less hazardous or nonhazardous material; redesigning a component so that HM is not needed in its manufacture, use, or maintenance; modifying processes or procedures; restricting use; limiting consumptive use; initiating on-demand supply, direct ordering, and extending shelf life; regenerating spent material; downgrading and encouraging reuse of spent material; and use of waste as raw material in other manufacturing or combinations of those factors. Alternatives are to be analyzed using a Cost - Benefit approach. Analyses will include the full range of environmental impacts in the context of real costs (i.e., fines, remediation, compliance permits, etc.).

Base Environmental Function: The 30 CES/CEV, Environmental Management Flight, possesses the responsibility for environmental management, planning and operational activities, and for establishing base-specific policy for all aspects of environmental management.

Baseline: Quantified starting points from which progress is measured. For the purposes of this instruction, baselines are quantities of material purchased, used, or generated over a specified period of time, and prior to source elimination or reduction activity commencement.

Characteristic Waste: A waste that exhibits any of the characteristics listed in 40 CFR 261, Subpart C (i.e., toxicity, corrosivity, ignitability, reactivity). See also 22 CCR 66261.

Composting: A waste management option involving the controlled biological decomposition of organic material in the presence of air to form a humus-like material. Controlled methods of composting include mechanical mixing and aerating, ventilating the materials by dropping them through a vertical series of aerated chambers, or placing the compost in piles out in the open air and mixing it or turning it periodically.

Cost Factors: The expense and cost avoidance associated with real or potential environmental releases that may be reduced to monetary terms, which include future liability. Cost factors refer to direct and indirect costs attributable to hazardous material that are encountered in operations such as acquisition, manufacture, supply, use, storage, inventory control, treatment, recycling, emission control, training, work place safety, labeling, hazard assessments, engineering controls, personal protective equipment, medical monitoring, regulatory overhead, spill contingency, disposal, remedial action, and liability.

Defense Environmental Network Information Exchange (DENIX): A DoD central electronic "meeting place". Allows timely access to environmental, legislative, compliance, restoration, cleanup, and DoD guidance information. Provides on-line review of environmental publications.

Environmental Compliance Management Information System (ECMIS): A comprehensive relational database system used as a management tool to support pollution prevention opportunity assessments, analyses, and reporting.

Economic Analysis: An evaluation of the costs associated with real or potential environmental releases. An economic analysis is a rational approach for making informed decisions, by which organizations shall be guided by basic principles of economics and informed judgment.

Environmental Manager: The base or unit environmental management function supervisor or designated representative. Synonymous with the term Unit Environmental Coordinator (UEC).

Environmentally Preferable: Products or services that are less harmful to human health and the environment to use, reuse, operate and maintain, and dispose of in comparison with competing products or services of equal value.

EPA 17 Targeted Chemicals: Seventeen chemicals selected for reduction or elimination based on their volume of use, toxicity, persistence, and mobility. Also known as EPA Industrial Toxics Project (ITP) chemicals.

Functional Areas: The operations or areas of responsibility that affect or are affected by the use of materials with the potential of environmental release. These areas include, but are not limited to, budget and fiscal planning, legal support, research and development, weapon systems acquisition and maintenance, material and performance specifications and standards, design handbooks, and technical manuals; maintenance and repair procedures, industrial processes, procurement policy, contracting provisions, new material identification, public works operations, construction; management of munitions, chemical agents, propellants; medical and other personnel support, safety and occupational health; transportation, and logistics analysis; supply; warehousing; distribution; recycling; disposal; spill prevention, control, and cleanup; contaminated site remediation; staffing, education, and training; information exchange; public affairs; general administration and oversight.

Generator: Any person, by site, whose act or process produces Hazardous Waste (HW), or whose act first causes HW to become subject to regulation. Environmental Protection Agency (EPA) and State environmental regulatory agencies typically consider the US Air Force installation, VAFB, as the generator. Therefore, references in this plan to the HW generator apply to VAFB.

Generating Activity: Each organization (including tenants), shop, and/or work area possessing an operation or process where HW originates. The generating activities (originators) are identified in the Waste Analysis Plan.

Hazardous Material (HM or HAZMAT): Anything that because of its chemical, physical, or biological nature, causes safety, public health, or environmental concerns. It includes those materials identified in the Code of Federal Regulation (29 CFR 1910.1200, for example). Numerous existing definitions of hazardous material are in place for various reasons. In this plan the term hazardous material is used in the context of the management strategy to implement pollution prevention initiatives for the protection of human health and the environment.

HAZMART Pharmacy: The agency within Base Supply which processes all HAZMAT requests for Vandenberg users.

Hazardous Substance: Any substance or material that poses a threat to human health or the environment typically due to its toxic, corrosive, ignitable, explosive, or chemically reactive nature. More specific definitions may be found in various Federal regulations which implement statutes (e.g. Hazardous Material Transportation Act, Comprehensive Environmental Response, Compensation and Liability Act, and Resource Conservation and Recovery Act).

Hazardous Waste (HW): Any waste or material as defined in 40 CFR 261.3, or applicable State (22 CCR 66261 et seq.) or local HW management rules and regulations.

Hazardous Waste Characterization: Hazardous waste characterization is the identification, classification, description, and quantification of a HW stream.

Industrial Solid Waste: Includes wastewater treatment sludges, solids from air pollution control devices, trim or scrap materials that are not recycled, fuel combustion residues (such as the ash generated by burning wood or coal), and mineral extraction residues.

Life Cycle Costs: An evaluation of the costs associated with the use of hazardous material and potential alternatives over the life of the investment or the hazardous material. The analysis is not a specific, step-by-step procedure that can be applied by rote to all cases. Analysis shall be guided by basic principles of economics and informed judgment.

Life Cycle of Hazardous Material: The period starting when the use or potential use of hazardous material is first encountered and extending as long as the actual material or its aftereffects, such as a discarded residual in a landfill, have a bearing on cost. In the case of weapon system acquisition, the life cycle starts when the system is first envisioned. Effects of the use of hazardous material on later operations and maintenance are to be considered. This also holds true for a new use of a hazardous material. Where the hazardous material is already in general use, the life cycle starts when the material is first encountered by any organization that must deal with it.

Management Action Plan: Within the Air Force, a single reference to manage the actions needed to develop and execute an installation's pollution prevention program.

Media: The term referring to water, air, land, and groundwater.

Mission Critical System: A system whose operational effectiveness and operational suitability are essential to successful completion or to aggregate residual combat capability. If this system fails, the mission likely will not be completed. Such a system can be an auxiliary or supporting system, as well as a primary mission system.

Municipal Solid Waste - Trash: Wastes generated by administrative and domestic activities. Municipal solid waste does not include hazardous wastes.

Nonpoint Source Pollution (NSP): A diffuse source of water pollution that does not discharge through a pipe, such as runoff from construction activities and agricultural, urban and industrial areas, including launch pad operating areas.

Opportunity Assessments: A systematic procedure to identify and assess ways to prevent pollution by reducing or eliminating wastes.

Ozone Depleting Chemicals (ODCs) and Ozone Depleting Substances: These terms are used interchangeably. Chlorofluorocarbons, halons, and other substances that deplete the stratospheric ozone layer as classified by the Clean Air Act.

Ozone Depleting Chemical Defense Reserve (Defense Logistics Agency Ozone Depleting Chemical Bank): The Defense Logistics Agency was assigned the mission of managing the Defense Reserve of ozone depleting chemicals to ensure that supplies for mission critical uses are available after production of these chemicals ceases. The Defense Logistics Agency will provide central management for the receipt, storage, and issue of ozone depleting chemicals through the Defense Depot - Richmond. Ozone depleting chemicals sent to the Defense Reserve will be placed in an Air Force Account. To remove these chemicals from the Reserve, an approved waiver is needed.

Ozone Depleting Chemical Appropriate Technical Representative: The approved representative of the Waiver Approval Authority. The appropriate technical representative is HQ AFMC/EN or designated representative (outside the Single Manager chain of command) for all Air Force applications. The appropriate technical representative, a government official, is assigned responsibility for performing an independent technical review of the ozone depleting chemical requirement to consider available options for substituting chemicals or alternate technology. The appropriate technical representative signs the certification statement in the waiver application.

Ozone Depleting Chemical Waiver Approval Authority: This official has the authority to approve waivers to allow the purchase or use of ozone depleting chemicals. The three waiver approval authorities for these interim procedures are SAF/AO, HQ USAF/LG, and HQ USAF/CE.

Ozone Depleting Chemical Suitable Substitute: An alternative to ozone depleting chemical use through elimination, process modification or material substitution that is technically, economically and legally feasible.

Pollution Prevention (P2): All the actions necessary, to include, use of processes, practices, products or management actions that eliminate or reduce undesirable impacts of environmental releases on human health and the environment. These actions are a hierarchy of source reduction, recycling, treatment, and disposal; or means "source reduction" and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, other natural resources, and the protection of natural resources.

PRO-ACT: An environmental information clearinghouse and hotline provided by the AFCEE for AF customers. It is designed to be the first point of contact for environmental

support services within AFCEE (DSN 240-4214 or COMM (800) 233-4356/ (210) 536-4214).

Program Element Code (PEC): Funding designation required for budgeting and programming AF projects. For Pollution Prevention the PEC is 78054.

Recycling: The use, reclamation, and reuse of a material. Use/reuse includes return of the waste to the original process or when the waste is substituted for a raw material in another process. Waste reclamation includes processing of residual waste to recover a useful product, silver recover for example.

Recycled Content: The amount of recovered material, either pre- or postconsumer, in a finished product that was derived from materials diverted from the waste management system. Usually expressed as a percent by weight.

Source Reduction: Any practice which reduces or eliminates any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise residual waste generation at the source, usually within the generation process. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, feed stock substitutions, improvements in feed stock purity, shipping and packaging modifications, improvements in housekeeping, maintenance, training, and management practices, increases in machinery efficiency, and recycling within a process.

Technology Master Process: A process integrating the various Research, Development, and Acquisition technology planning, development, transition, and application/insertion sub-processes within Air Force Material Command into a single end-to-end master process. The goal is to formulate, with full participation by all the stakeholders, an integrated list of technology development projects that is responsive to internal and external Air Force Material Command technology customers.

Waste Minimization: The reduction of the quantity or toxicity of a residual waste that is generated and subsequently processed, stored, or disposed; its reduction minimizes present and future threats to human health and the environment.

WIMS-ES: Work Information Management System - Environmental Subsystem. A subsystem of Civil Engineer's WIMS computer management information system for programming and budgeting environmental projects. Provides for daily transfer of data between bases, MAJCOMs and Air Staff.

HEADQUARTERS THIRTIETH SPACE WING
Vandenberg Air Force Base, CA 93437-5000
6 May 1996

30TH SPACE WING PLAN 32-7080

CHAPTER 1 INTRODUCTION

This Pollution Prevention Management Plan (PPMP) establishes the overall strategy, delineates responsibilities, and sets forth specific objectives for reducing pollution of the air, ground, surface water and groundwater. The P2 program consists of various policies aimed at achieving 30th Space Wing goals and objectives for reducing pollution, through revised practices, procedures, and operational requirements. Effective pollution prevention requires not only innovative application of technology but active, continuing participation at all levels of management at VAFB and remote site under the cognizance of 30th Space Wing. Throughout this plan VAFB and the remote sites may be collectively referred to as "Vandenberg". This PPMP supports Air Force Directives and is intended to ensure compliance with applicable federal, state and local regulations. **For the most part, the objectives and requirements stated in this PPMP are mandated by law, and are therefore, not discretionary.**

SECTION A. BACKGROUND. The generation and disposal of large amounts of hazardous and solid waste have resulted in environmental contamination and pose actual and potential threats to human health and the environment. This condition led Congress to enact extensive environmental legislation to foster environmental protection. Early legislation took a media-by-media approach. For example, the Clean Air Act (CAA) dealt only with air, and the Clean Water Act (CWA) dealt only with water. Such acts focused primarily on the control and the treatment of pollution. Contemporary legislation has moved toward a multimedia approach with its primary focus on pollution prevention (source reduction and recycling) rather than pollution control (treatment and disposal). The Pollution Prevention Act of 1990 was enacted to implement the national objective of pollution prevention by establishing a source reduction program. The statute:

- establishes a national policy on pollution;
- directs EPA to conduct pollution prevention training and other activities and to establish advisory groups, an award program, and a source reduction clearinghouse;
- provides for matching grants to states for technical assistance programs;
- requires businesses to report source reduction and recycling data in their annual toxic release inventory reports; and
- requires biennial reports by EPA to Congress on pollution prevention activities and results.

The Air Force has developed a Pollution Prevention Program to implement the requirements of the Resource Conservation and Recovery Act (RCRA), Hazardous and Solid Waste Amendments (HSWA), and the Pollution Prevention Act of 1990. DoD Directive 4210.15, Hazardous Material Pollution Prevention, further enunciates program goals and requirements. The latest Air Force Pollution Prevention guidance is found in Air Force Instruction (AFI) 32-7080, dated 12 May 1994 and the Air Force Installation Pollution Prevention Program Guide, dated August 1995. The USAF program requires each installation to develop a Pollution Prevention Management Plan outlining an overall program strategy. This PPMP is 30th Space Wing's implementation of the AFI 32-7080 requirements and follows the guidelines established in the 1995 Air Force Installation Pollution Prevention Program Guide.

1. Implementation (Effective Date). The objectives, policies and instructions included within this PPMP are effective when approved by the Commander, 30th Space Wing, under authority as the responsible official for implementing requirements of RCRA, HSWA and the Pollution Prevention Act of 1990.
2. Implementation (Operations to be Conducted). This PPMP serves to: help identify and describe pollution prevention goals, objectives, strategies and management practices used on VAFB and the remote sites; determine applicable federal, state and local requirements; and describe how to comply with these requirements. **Should there be a conflict between this PPMP and applicable regulatory requirements, the regulatory requirements will have precedence.** This PPMP may direct 30th Space Wing management requirements which are more stringent than regulations.

SECTION B. OVERVIEW. This Pollution Prevention Management Plan fulfills requirements under RCRA, SB-14, DoD Directive 4210.15, and AFI 32-7080. It is a stand-alone management plan that along with the Hazardous Waste Management Plan, the Wastewater Management Plan, Hazardous Materials Emergency Response Plan, the Integrated Solid Waste Management Plan and other associated waste minimization directives, plans or guidelines forms the basis for reducing pollution at VAFB and the remote sites. This plan, as 30th Space Wing's management strategy, addresses the following areas:

- pollution prevention goals, objectives, and strategy (Chapter 2);
- program structure, organization, and responsibilities (Chapter 3);
- program elements and implementation strategy (Chapter 4 and 5);
- pollution prevention opportunity assessment procedures (Chapter 6);
- pollution prevention opportunities (Chapter 6);
- program reporting and tracking (Chapter 4 and 7); and
- program funding (Chapter 7).

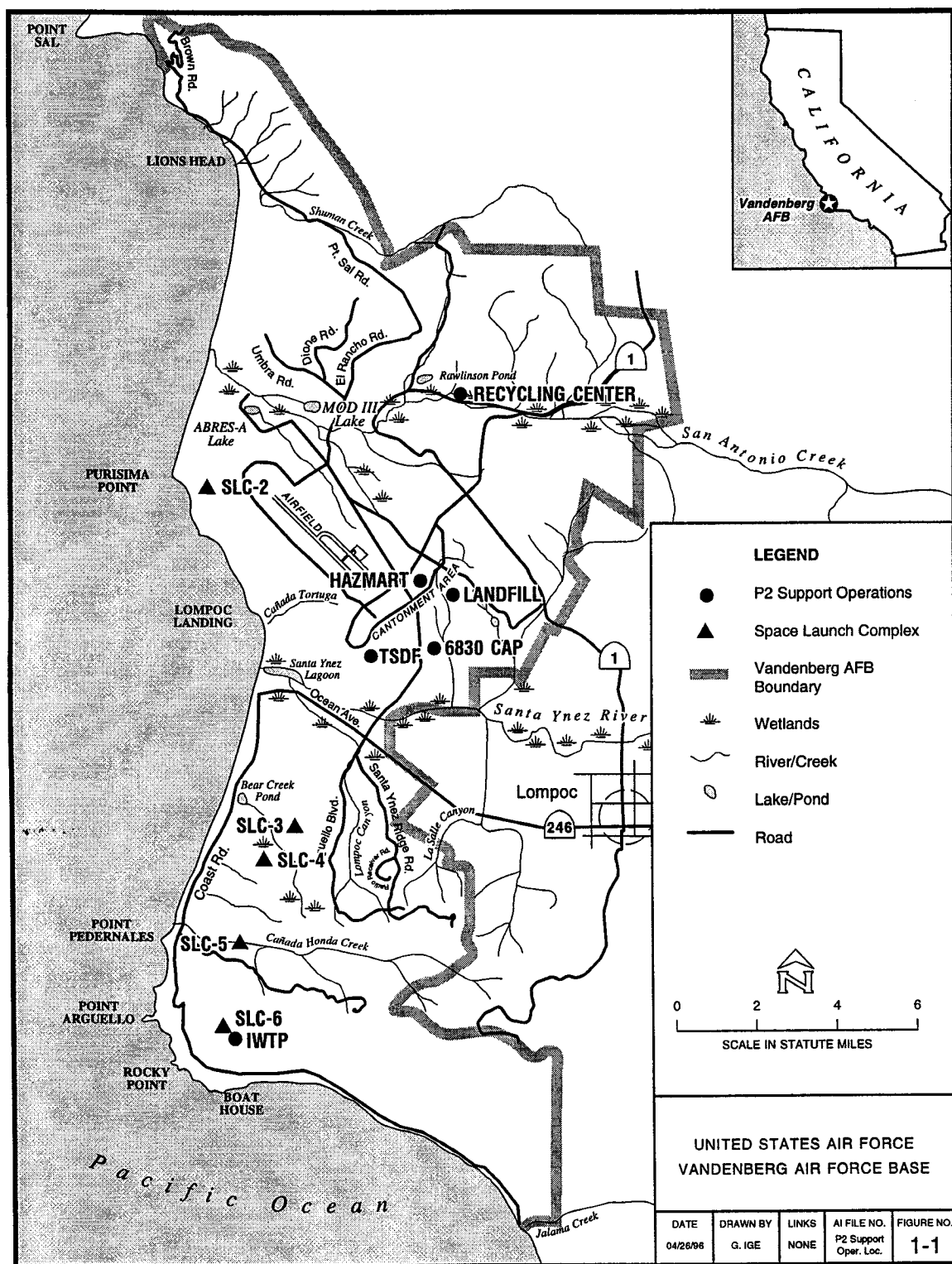


Figure 1-1, Base Map with Selected P2 Support Sites

1. Vandenberg AFB Overview.

a. Location. Vandenberg AFB is located 55 miles north of the City of Santa Barbara near Lompoc, California, in northern Santa Barbara County (See Figure 1-1). Covering more than 98,000 acres, it is the third largest US Air Force installation. The 154-square-mile facility includes an estimated 1,000 buildings, 520 miles of roads, 80 miles of gas pipelines, and 17 miles of railroad track. Approximately 3,500 military personnel, 1,300 federal civilian employees and 5,000 other civilians work on base. Figure 1-1 provides an overview of Vandenberg's P2 features.

b. Mission. Vandenberg's host unit, the 30th Space Wing, conducts space-lift and ballistic missile operations and manages the Western Test Range (referred to as Western Range) as a national asset to support government and commercial space, ballistic, and aeronautical operations. VAFB is the site of all military, NASA, and commercial space launch facilities for testing intercontinental ballistic missiles in support of Minuteman and Peacekeeper systems. Space boosters used to launch satellites into polar orbit include Atlas, Delta, Pegasus, Taurus, Titan, and commercial launch vehicles.

c. Activities in Support of Pollution Prevention. The 30th Space Wing's subordinate units provide the base support services for VAFB's pollution prevention program (refer to Figure 1-1). Most support operations are centered around the "Cantonment" area, in a location close to the center of the northern half of the base (e.g., HAZMART, Collection & Accumulation Point (CAP), base landfill, and Transportation, Storage & Disposal Facility (TSDF). Other Pollution prevention operations are located further north (i.e., Recycling Center) while others are located on the southern half of the base (i.e., Industrial Wastewater Treatment Plant (IWTP)).

2. 30th Space Wing Remote Sites Overview.

California

- Anderson Peak Optics Site is 4100 feet above sea level at the edge of the Ventana Wilderness in the Santa Lucia Range in the Los Padres National Forest, 30 miles south of Monterey, California. The site is operated under special use permit from the Department of Agriculture through the U.S. Forest Service. Anderson Peak Optics Site was designed to support missile activity at Vandenberg AFB, specifically, recording missile launches across the Pacific Ocean into the Western Test Range (now called Western Range). The site contains a telescope building and eight related outbuildings;
- The Santa Ynez Peak Optics Site is 4100 feet above sea level in the Los Padres National Forest, 42 miles southeast of Vandenberg AFB. Like

Anderson Peak the site is operated under special use permit from the Department of Agriculture through the U.S. Forest Service. Santa Ynez Peak Optics Site was designed to support missile activity at Vandenberg AFB, specifically, recording missile launches across the Pacific Ocean into the Western Test Range. The site contains a telescope building and related outbuildings;

- The Pillar Point Satellite Tracking Station is located on a 55-acre parcel, approximately 20 miles south of San Francisco, California. Pillar Point Satellite Tracking Station supports both ballistic and orbital missile operations and is equipped with radar tracking, telemetry reception, command control and communications services. The site contains 39 buildings and related outbuildings;

Hawaii

- The Kaena Point Satellite Tracking Station is located on Kuaokala Ridge atop the Waianae Mountain Range at the westernmost tip of Oahu, Hawaii. The site is part of a 153-acre parcel leased from the State of Hawaii and is surrounded by the Kuaokala Forest Reserve. In 1972 the Western Space and Missile Center (now called Western Operations) added an AN/FPQ-14 radar to the site. The site contains nine buildings and structures;
- The Wheeler Network Control Center (NCC) is located in the central portion of Oahu, Hawaii in the Leilehua Plain between the Waianae and Koolau Mountain ranges. An integral part of Western Operations, the NCC supports missile activity from Vandenberg Air Force Base in the Western Range. The site is a 1-acre parcel at Wheeler Army Air Field and facilities include three buildings and one antenna structure;
- The Ewa Beach High Frequency Transmitting Site is located on a 255-acre parcel in the Ewa District on the southwest coast of Oahu, Hawaii. It was established in 1966 as part of the communications network created by Western Operations to support missile activity from Vandenberg Air Force Base in the Western Range. The site contains three buildings and eleven antenna structures and is operated and maintained by a contractor; and
- The Molokai High Frequency Receiving Site is located on a 363-acre parcel adjacent to Hoolehua, on the island of Molokai, Hawaii. The site was established in 1967 as part of the communications network created by the Western Operations to support missile activity from Vandenberg Air Force Base into the Western Range area. Facilities include three buildings and six antenna structures.

Force Base into the Western Range area. Facilities include three buildings and six antenna structures.

The remote sites in California and Hawaii (Figure 1-2) are under the jurisdiction of 30th Space Wing. They are generally classified as small quantity generators and users of hazardous materials. They are included in this plan to meet Air Force and other regulatory requirements.



Figure 1-2, 30th Space Wing Remote Sites

3. Purpose. The purpose of this PPMP is to provide sufficient guidance and direction for a comprehensive and unified approach to pollution prevention management and operations on Vandenberg Air Force Base and remote sites under the jurisdiction of 30th Space Wing. This plan delineates responsibilities and provides guidance for achieving the 30th Space Wing pollution prevention goals. This plan is also intended to ensure compliance with applicable federal, state and local regulations.
4. Applicability. This PPMP is applicable to all military units, DoD and non DoD agencies, government and non-government contractors, and commercial operators who conduct activities on VAFB and the remote sites which have the potential to pollute the environment. An exemption from compliance with this PPMP must be justifiable under federal, state and/or local laws and regulations, whichever is the most stringent; and such requests for exemption must also be authorized by 30 CES/CEV. This PPMP is not to be construed as a contract directive. **Contracting officers will ensure that this PPMP is implemented through appropriate contractual documents/ commercialization agreements.**
5. Federal Regulations The following regulations highlight some, but not all, of the references which either establish requirements, direct actions or provide guidance for P2 activities.
 - a. Pollution Prevention Act of 1990. This act set the foundation for a new approach to improving environmental quality. Prevention, rather than control or treatment, became the overall strategy, and “source reduction” provided the means for implementation. This act directed EPA to:

- (1) Promote source reduction practices in other federal agencies and,

- (2) Identify opportunities to use federal procurement to encourage source reduction.

The act went on to define the broad scope of source reduction and set in motion timetables and goals that were to appear later in other department’s (DoD, for example) guidance (AFI 32-7080, for example). The act defined “source reduction” to mean any practice that:

- (1) Reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal (the P2 hierarchy); and
 - (2) Reduces the hazards to public health and the environment associated with the release of such substances, pollutants or contaminants.

- b. Clean Air Act Amendments of 1990 (CAAA). This act directs EPA to develop standards for new sources to reflect a degree of emission limitations and source reductions. Specific reduction timetables require emission reductions through the year 2000. This act lists the Class I and Class II ozone depleting chemicals (ODCs) and the EPA-17 Industrial Toxic Project Chemicals which must meet specific reductions according to individualized timetables.
 - c. Emergency Planning and Community Right-to-Know Act (EPCRA), 1986. The pollution prevention "teeth" of this act are found under Section 313, which establishes the Toxic Release Inventory (TRI) requirement. Section 313 requires certain manufacturers to report the amount of each of more than 600 toxic chemicals listed in the Act that are released to the air, land, or water prior to their treatment or off-site transfer. Executive Order 12856 directs Federal Facility compliance with EPCRA and broadens the definition of who shall report TRI releases.
 - d. Resource Conservation and Recovery Act, 1976. This act requires EPA to conduct a biennial census of hazardous waste generators. Through this process generators are identified and characterized according to size, "large-quantity/small-quantity". **The generators of waste are required to institute waste reduction programs and must certify on disposal documentation (manifests) that waste reduction programs are in place.** While the exact nature of waste reduction efforts is not required to be specified, VAFB and other generators of hazardous waste should expect increasing scrutiny in this area because of the recently enacted Federal Facilities Compliance Act.
6. State Regulations. Many of the Federal P2 requirements and initiatives have "rolled-down" into state programs. That is, sections within federal regulations either direct or allow states to implement pollution prevention programs, so long as state programs are no less stringent than the federal program. California has long been in the forefront of environmental regulation and has enacted its own P2 laws and regulations; some independent of federal "roll-down" regulation.
- a. The California Integrated Waste Management Act (14 CCR, 18720-18788). This act requires counties to submit an integrated waste management plan, wherein each county and city within the county must adopt a source reduction and recycling plan. By January 1, 1995, each element within the plan must include an implementation schedule that will divert a quantity of solid waste equaling 25 percent of the CY 1990 baseline. VAFB participates in Santa Barbara County's plan. This plan includes eight elements:
 - (1) Waste Characterization Component - types and quantities of waste generated;
 - (2) Source Reduction Component - the program, schedule and methods for source reduction;

- (4) Composting Component - planned composting program and implementation schedule;
 - (5) Education and Public Awareness - how public participation will be encouraged;
 - (6) Funding Component - what are costs and sources of revenues;
 - (7) "Special Waste" Component - identifies proper handling of materials like PCB's, sewage sludge; and
 - (8) Facilities Capacity Component - measures capacity and actions required for management of wastes for a 15 year period.
- b. The California Hazardous Waste Source Reduction and Management Review Act of 1989 (SB-14). This Act, commonly referred to as Senate Bill 14 or SB-14 has already been implemented on VAFB. The initial plan, report, and report summary have been made available to the state (Sept 1991). To meet the SB-14 requirements for updating the SB-14 Plan, the 30th Space Wing has incorporated requirements in this PPMP to track disposed hazardous waste by California waste codes (CWCs); and identified waste minimization measures and goals to achieve reductions for hazardous waste and extremely hazardous waste which exceed 5 percent of VAFB's total hazardous waste. This act requires certain generators of hazardous waste to determine and implement alternatives to reduce the amount of hazardous waste generated; and for hazardous wastes generated, to document and implement source reduction measures, including a reasonable implementation schedule. Accompanying the report is a certification requirement attesting that proposed reduction actions "do not merely shift hazardous waste from one environmental medium [to another] by increasing emissions or discharges to air, water, or land." (Health and Safety Code Sec 25244.19(e)).
- c. Senate Bill 1726 (SB-1726) of 1992 changed the requirements of SB-14. SB-1726 expanded the universe of generators who had to comply with reduction requirements by reducing the waste production threshold from greater than 12,000 kilograms (26,400 lbs) to greater than 5000 kilograms (11,000 lbs). The applicable categories of waste are specified in Health and Safety Code subsections 25179.7 (a) (1), (2) and (3), and include items such as:
- (1) RCRA hazardous waste for which a RCRA treatment standard has not yet been developed;
 - (2) Non-RCRA solid hazardous wastes containing metals; and
 - (3) Non-RCRA hazardous waste whose treatment standards are based on incineration, solvent extraction, or biological treatment.

SB-1726 also requires every generator who is subject to either SB-14 or SB-1726 to prepare a four-year numerical source reduction goal. The goal is included in the generator's plan (SB-14)/compliance checklist (SB-1726). The numerical goal, expressed as a percentage, represents waste stream reductions due only to source reductions and excludes effects due to production (operations) variations or economic (mission) influences.

7. Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements. Directs that all Federal Facilities will be required to adhere to the same planning and reporting provision of federal right-to-know and pollution prevention laws that cover the private sector. A written pollution prevention strategy, to include a policy statement emphasizing source reduction as the primary method of environmental protection and compliance is required. Also included are requirements to conduct opportunity assessments and develop a plan and goals for eliminating or reducing the unnecessary acquisition of products containing extremely hazardous substances or toxic chemicals. Pollution reduction goals and schedules for toxic pollutants are also specified.
8. Air Force Regulations/Instructions. The following documents form the foundation of the Air Force's P2 program.
 - a. Air Force Policy Directive 32-70, Environmental Quality, Nov 1993, states that the Air Force will eliminate pollution from its activities wherever possible. Adherence to pollution prevention policy will be assessed by measuring hazardous and solid wastes disposal amounts and comparing numbers to the respective values for the baseline year (FY 92).
 - b. Air Force Instruction 32-7080, Pollution Prevention Program, May 1994, delineates requirements for the Pollution Prevention Program. It provides requirements for program management, PPMP's, opportunity assessments and other program elements. This AFI provides guidance to installations for successful execution of pollution prevention actions.
 - c. Air Force Instruction 32-7002, Environmental Information Management System, May 1994, provides guidance and procedures to standardize the use of the Air Force-wide computerized management information system. Chapter 13 of this AFI discusses the "Pollution Prevention Module" and gives examples of required report formats (also included in Chapter 7 of this PPMP).
9. List of References. In addition to the references discussed above, this list of pollution prevention references is found in AFI 32-7080.
 - Pollution Prevention Act of 1990, November 5, 1990;
 - Clean Air Act Amendments of 1990;
 - Resource Conservation and Recovery Act;
 - 40 Code of Federal Regulations, Part 247;

- Pollution Prevention Act of 1990, November 5, 1990;
- Clean Air Act Amendments of 1990;
- Resource Conservation and Recovery Act;
- 40 Code of Federal Regulations, Part 247;
- 40 Code of Federal Regulations, Part 372.65, Toxic Release Inventory List;
- Emergency Planning and Community Right-to-Know Act of 1986;
- Superfund Amendments and Reauthorization Act of 1986;
- National Defense Authorization Act For Fiscal Year 1993;
- Public Law 97-214, 10 U.S.C. Section 2577, Disposal of Recyclable Materials;
- Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities, March 8, 1994;
- Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 3, 1993;
- Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention, October 20, 1993;
- Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities;
- DoD Directive 4210.15, Hazardous Materials Pollution Prevention, July 27, 1989;
- DoD Directive (DoDD) 4150.7;
- DoD Instruction 7310.1, Disposition of Proceeds from DoD Sales of Surplus Personal Property, July 10, 1989;
- Deputy Under Secretary of Defense (Environmental Security) Memorandum, Policy for DoD Recycling, September 28, 1993;
- DUSD(ES) Letter, 23 September 1994, Pest Management, Measures of Merit;
- HQ AFCEA/CC Letter, 15 May 1995, Integrated Pest Management - Pollution Prevention Initiative;
- Engineering Technical Letter (ETL) 94-7, EPA Guideline Items in Construction and other Civil Engineer Specifications;
- Chief of Staff of the Air Force/Secretary of the Air Force Action Memorandum, Air Force Pollution Prevention Program, January 7, 1993;
- Chief of Staff of the Air Force/Secretary of the Air Force Action Memorandum, Air Force Ban on Purchases of Ozone Depleting Chemicals, January 7, 1993;
- Chief of Staff of the Air Force/Secretary of the Air Force Action Memorandum, Air Force Action Policy on Using Recycled Products, September 25, 1992;
- SAF/AQ Policy Memorandum 93M-011, Pollution Prevention in Air Force Acquisition Programs, December 23, 1993;
- Air Force Pollution Prevention Strategy, 24 July 1995;
- Energy Policy Act (EPACT) of 1992; and
- Air Force Guidance for TRI Reporting, 10 April 1995.

30TH SPACE WING PLAN 32-7080

CHAPTER 2 PROGRAM REQUIREMENTS

This chapter provides a broad view of the Air Force's Pollution Prevention Management Program and how Vandenberg Air Force Base and remotes site under the jurisdiction of 30th Space Wing will organize resources to meet Air Force requirements. At 30th Space Wing the resources of many organizations, applied over significant periods of time, will be required to ensure success of on-going P2 activities. Success of the 30th Space Wing P2 program depends upon the cooperation and interaction of several Air Force commands, a multitude of military and DoD contractor organization, and civilian operators who conduct pollution generating activities on the 98,000 acre installation and the remotes sites.

SECTION A. PROGRAM POLICY.

1. The Air Force is committed to environmental leadership and preventing pollution by reducing the use of hazardous materials and releases of pollutants into the environment. The AF pollution prevention policy is solidly in step with national policy as stated in the Pollution Prevention Act of 1990. The act calls for pollution prevention at the source whenever feasible; this is the foundation for the Air Force's program as well. Preventing pollution requires an active management approach because prevention achieves environmental standards through source reduction rather than "end-of-pipe" treatment. P2 actions range from the most preferred choice of source reduction, to recycling, treatment, and finally disposal as a last resort. This hierarchy of actions must be fully integrated into day-to day operations to build a strong pollution prevention program.
2. P2 efforts apply equally to all aspects of the Air Force mission: from concept development through production, deployment, and ultimate disposal of new weapon systems, to finding less hazardous materials and processes and integrating them into technical orders, military specifications, and military standards of existing (deployed) systems; to reducing hazardous materials use and waste generation at installations.

SECTION B. PROGRAM GOALS. Specific goals have been established for selected pollution prevention program components: Ozone Depleting Chemicals (ODCs), Environmental Protection Agency 17 (EPA-17) Industrial Toxic Project Chemicals, Hazardous Waste, Municipal Solid Waste, Environmentally Preferred Products (Affirmative Procurement), Energy Conservation (including Water Conservation), TRI

Reporting, and Pesticide Management. These program components will be continuously monitored and measured to ensure goals are achieved. Measurements will be taken against a CY 1992 baseline for the first four program components; the fifth program component, Environmentally Preferred Products (Affirmative Procurement), is evaluated each year, against itself. The sixth component, Energy Conservation, is measured against a 1985 baseline; and Water Conservation against the 1995 audit details. EPCRA/TRI releases are reported against the CY 1994 baseline while Pesticide Management is measured against the CY 1993 baseline. Table 2-1 summarizes the pollution prevention goals which VAFB and the remote sites under the jurisdiction of 30th Space Wing are required to achieve. The goals are derived from the *Air Force Pollution Prevention Strategy* released by the Chief of Staff of the Air Force/Secretary of the Air Force on 24 July 1995.

TABLE 2-1**AIR FORCE POLLUTION PREVENTION GOALS**

PROGRAM COMPONENT:	BASELINE YEAR:	GOAL:
Ozone Depleting Chemicals	1992	100% reduction of purchases by 1 Apr 93
Environmental Protection Agency 17 (EPA-17) Industrial Toxic Project Chemicals	1992	50% reduction of purchases by 31 Dec 96
Hazardous Waste Minimization	1992	25% reduction in disposal by 31 Dec 96 50% reduction in disposal by 31 Dec 99
Municipal Solid Waste	1992	10% reduction in disposal by 31 Dec 93 25% reduction in disposal by 31 Dec 96 50% reduction in disposal by 31 Dec 97
Environmentally Preferred Products	None	100% of all products purchased each year in each of EPA's "Guideline Item" categories shall contain recycled materials meeting EPA's guideline criteria
Energy Conservation	1985	20% reduction in BTU/sq. ft by 2000 30% reduction in BTU/sq. ft by 2005
Water Conservation	1995	Identify and accomplish all water conservation actions which pay back in ten years or less Audit 10% of facilities each year
EPCRA/TRI Chemical Releases	1994	50% reduction of total releases and off-site transfers by 1999
Pesticide Management	1993	50% reduction in pounds of active ingredient by 2000

Table 2-1, Pollution Prevention Goals

SECTION C. PROGRAM OBJECTIVES. The Pollution Prevention objectives are to:

1. Meet Air Force, federal, state, and local pollution prevention goals;
2. Enhance 30th Space Wing's compliance position with respect to federal, state and local environmental laws;
3. Actively participate in and contribute to the identification, implementation and evaluation of innovative ideas to reduce HM use and waste generation;
4. Promote pollution prevention as an integral part of the 30th Space Wing mission;
5. Maintain a positive position and leadership role when interacting with local communities on common pollution prevention issues and initiatives; and
6. Make VAFB and the remote sites a model for other Air Force units to emulate.

SECTION D. PROGRAM STRATEGY. To achieve pollution prevention goals and objectives, a strategy based on the following will be used to guide actions:

1. Pollution prevention is a total systems program. The program includes not only waste generation but also material acquisition, handling and use of materials, production and operational activities, process management, waste management and disposal. It is a cradle-to-grave approach, wherein there is an accounting of what enters, is used, and what leaves VAFB and the remote sites (mass balance).
2. Pollution prevention requires managerial as well as technological solutions. Management involvement at all levels is as important as applying technology-based solutions. Management is the key element in P2 success.
3. Pollution prevention adheres to a hierarchy of management:
 - a. Source reduction to prevent the creation of waste;
 - b. Recycling of waste or used material that cannot be prevented at the source;
 - c. Treatment of waste, in an environmentally safe manner, that cannot be prevented or recycled; and
 - d. Environmentally compliant disposal only as a last resort.

SECTION E. PROGRAM STRUCTURE. The following figure, "Program Structure", depicts Vandenberg's Pollution Prevention Program's structure with the office symbol of those who chair the committee/group. This "Program Structure" may be emulated by remote sites under the jurisdiction of the 30th Space Wing.

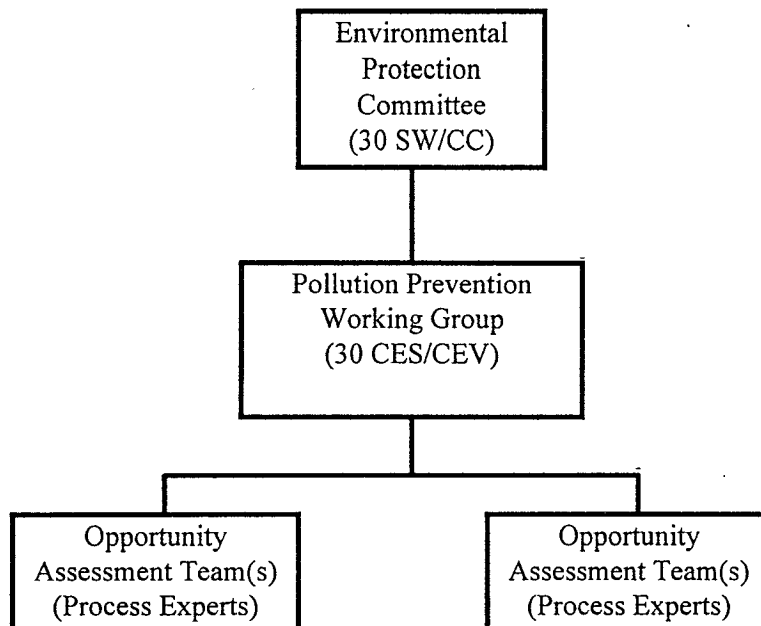


Figure 2-1, Program Structure

1. Environmental Protection Committee. The Pollution Prevention Program comes under the auspices and direction of 30th Space Wing's Environmental Protection Committee (EPC). The EPC is responsible for overall management and direction of the program. Chaired by the Wing Commander, 30 SW/CC, the EPC provides pollution prevention policy, directs program implementation, and tracks progress toward pollution prevention goals. The EPC is 30th Space Wing's focal point for ensuring base compliance with Air Force, federal, state and local regulations and guidance regarding pollution prevention. (See Chapter 3 for further details.)
2. Pollution Prevention Working Group. The Pollution Prevention Working Group supports the EPC by implementing and managing the Pollution Prevention Program. Membership on, and responsibilities of this working group are dependent upon the particular pollution prevention activities. That is, when the Pollution Prevention Working Group is working a procurement aspect of P2, 30 LSS and 30 CONS would be participants; but when working a composting alternative, these organizations might

not be active on the working group. The Pollution Prevention Working Group ensures the coordinated actions of 30th Space Wing organizations/activities result in a coherent, comprehensive program. (See Chapter 3 for further details).

3. Opportunity Assessment Team(s). Opportunity Assessment Team(s) are constituted by the Pollution Prevention Working Group. The Working Group determines if in-house resources will be used to form a Team, or if outside experts will be contracted to conduct a particular opportunity assessment. No matter which method (team) is selected, the task remains the same. That is, the Team will conduct assessments following a systematic procedure designed to identify ways to reduce or eliminate waste, or adverse environmental impacts. Thus, Teams will be composed of people sufficiently knowledgeable of the process/procedures to ensure that assessment findings meet program requirements and represent rationale, implementable alternatives. (See Chapter 3 for further details.)

HEADQUARTERS THIRTIETH SPACE WING
Vandenberg Air Force Base, CA 93437-5000
6 May 1996

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CHAPTER 3 RESPONSIBILITIES

This chapter provides an overview of organizational and personnel responsibilities inherent in an effective P2 program. Specific responsibilities are listed, but these taskings/roles must be understood in the broader context of the cooperative efforts required to execute the many elements of a P2 program. A "30th Space Wing Team" approach, relying upon the participation of all organizations and individuals, is required to meet P2 goals and ensure P2 success. Primary responsibility begins with process owners and those who use hazardous, polluting substances in their operations.

SECTION A. ORGANIZATIONAL CHART. A Notional Chart of Vandenberg AFB is presented in Figure 3-1. This chart graphically portrays the P2 program's management hierarchy used by the 30th Space Wing. The chart is not intended to illustrate military organizational command structure, or line and staff functions.

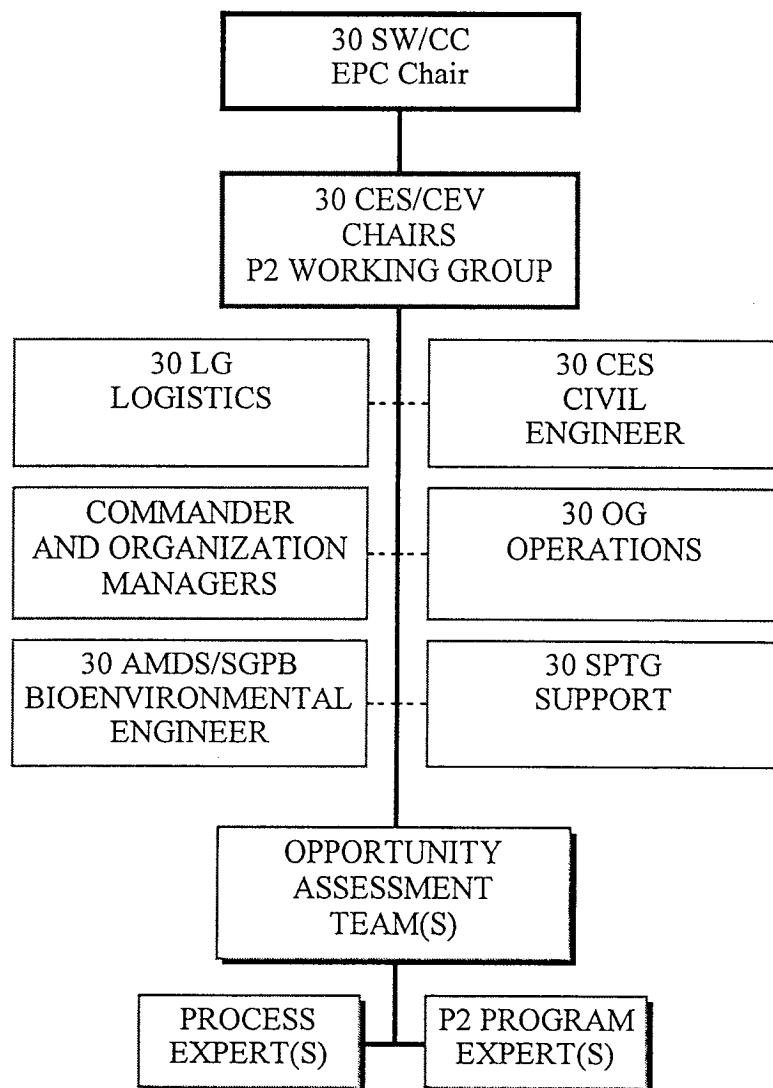


Figure 3-1, P2 Program Organization

SECTION B. TASKED ORGANIZATIONS. A summary of tasks and organizational responsibilities is presented in Table 3-1, “P2 Tasks and Responsibilities Matrix.” This matrix is expanded upon in the detailed descriptions of Section C which follows.

	Policy	Baselines	Goals	P2 Opportunities	P2 Projects	P2 Operations	Funding	Reporting Tracking
Commander(s)	X	X	X				X	
EPC	X	X	X				X	X
P2 Working Group		X	X	X			X	X
Assessment Team(s)				X	X	X	X	X
Environmental Management	X	X	X	X	X	X	X	X
Bioenviron. Engineering				X	X	X	X	
Budget/ Finance							X	X
Civil Engineering				X	X	X	X	X
Contracting				X	X	X	X	X
Legal	X							
Logistics				X	X	X	X	X
Plans				X	X		X	
Process Owner(s)			X	X	X	X	X	X
Public Affairs			X					X
Services				X	X	X		

Table 3-1, P2 Tasks and Responsibilities Matrix

SECTION C. SPECIFIC RESPONSIBILITIES. The following paragraphs provide specific responsibilities for organizations and personnel charged with P2 management and implementation at Vandenberg. Tasked organizations will work together to ensure an effective P2 program, and they will assist the Environmental Management function by maintaining currency of, and providing comments on this Pollution Prevention Management Plan to 30 CES/CEV.

1. Installation Commander (30 SW/CC) will:

- a. Be responsible for compliance with federal, state and local laws and regulations applicable to Pollution Prevention on VAFB;
- b. Ensure the P2 program for VAFB and the remote sites under the jurisdiction of the 30th Space Wing receive appropriate Command attention and support;
- c. Ensure the P2 policies and goals in this PPMP are implemented and attained; and
- d. Designate Environmental Management (30 SW/ET) to ensure proper execution of the P2 program.

2. Environmental Protection Committee (30 SW/CC) will:

- a. Directs matters involving P2 management;
- b. Be composed of Air Force members as specified in the base supplement to AFR 19-8 (also see AFI 32-7005), and invited contractors;
- c. At the planning level, assess P2 requirements and capabilities, establish P2 priorities, and review plans and procedures for policy implementation;
- d. Review this PPMP, at least annually, to ensure changes are submitted as needed to keep the plan up-to-date; and
- e. Assess P2 requirements not previously identified and ensure appropriate implementation through plans, policy letters, funding or other means, as appropriate.

3. Environmental Management (30 SW/ET) will:

- a. Report to the 30 SW/CC on the status of all base-wide and remote site environmental programs including P2;
- b. Ensure VAFB and remote site personnel are informed on current P2 issues;
- c. Ensure development of long-range planning strategies for pollution prevention.

4. Public Affairs (30 SW/PA) will:

- a. Support the Commander in the release of timely and accurate P2 information to the general public, as well as personnel assigned duties under the jurisdiction of the 30th Space Wing;
- b. Coordinate with 30 CES/CEV prior to the release of information related to P2 management and/or projects;
- c. Assist with P2 incentive programs through the release of news articles/features; and
- d. Function as central point of contact between the public, news media, community leaders, etc., and the base (including remote sites), through its main office and its Installation Restoration Program satellite public affairs office.

5. Civil Engineer (30 CES/CC) will:

- a. Assign, equip and train sufficient resources to support the implementation of this PPMP through the various flights and sections within the Civil Engineer Squadron;
- b. 30 CES/CEOXL, Landfill, will operate VAFB's solid waste landfill, weighing and monitoring disposal loads, ensuring compliance with the operating permit and submitting reports as required;
- c. 30 CES/CEOM, Material Acquisition, will provide logistical support, ordering, warehousing and distributing materials used for projects and infrastructure support. Also will function as vehicle control for Civil Engineering;
- d. 30 CES/CED, Explosive Ordnance, will manage and operate the EOD range, ensuring proper disposal of propellants, explosives and pyrotechnics. It is also responsible for the security and control of the Unexploded Ordnance landfill located between Utah Ave. and the Civil Engineering complex; and
- e. 30 CES/CEC, Engineering and Construction Flight, will design and monitor construction projects, conduct program development, and be responsible for base comprehensive planning.

6. Environmental Management Flight (30 CES/CEV) will:

- a. Assign, equip and train sufficient resources to provide the necessary guidance, technical expertise and assistance to support implementation of this PPMP;

- b. Ensure VAFB and remote site personnel are informed on the current operational aspects of the P2 program and are kept apprised of P2 goals and progress toward meeting goals. Interpret and promulgate P2 policy in a manner to meet regulatory compliance milestones or goals;
- c. Maintain routine liaison and policy-making relationship with the Air Force, the EPA, and State regulatory agencies for P2 program interpretation, P2 program management, and P2 program reports;
- d. Coordinate with other agencies, such as 30 LG, 30 AMDS/SGPB, 30 CONS, 30 RANS, etc. on matters pertaining to P2 operations and management;
- e. Coordinate and administer long-range planning strategies for pollution prevention;
- f. Serve as the office primarily responsible for coordinating P2 initiatives as Supplemental Environmental Programs (SEPs) with regulators/agencies in the event such SEPs are desired to offset violation/deficiency notifications;
- g. Maintain documentation files pertaining to P2 management which include plans, procedures, inventories and reports. Ensure the "A-106" process is followed to obtain funding for P2 projects;
- h. Prepare and maintain all necessary P2 reports and records. Ensure the reporting guidance in AFI 32-7080 and AFI 32-7002 is followed;
- i. Coordinate with process owners on opportunity assessments and P2 projects;
- j. Coordinate with 30 SW/ET and other agencies, as necessary, on funding requirements for the P2 program;
- k. Provide for training of VAFB and remote site personnel serving on Opportunity Assessment Teams;
- l. Act as the primary contact for federal, state and local agency audits to include the Air Force's Environmental Compliance Assessment and Management Program (ECAMP), and address the findings to the appropriate action office. Ensure corrective actions are implemented, forwarding written responses/comments to the appropriate agency(ies);
- m. Serve as the environmental budget manager, working with 30 SW and tenant organizations, and Air Force Space Command on matters related to budgeting and funding of P2 program initiatives;

- n. Manage and direct the Wing Environmental Services Contractor, and ensure that hazardous waste reduction is an integral part of the waste management process;
- o. Serve as chair of the Pollution Prevention Working Group; and
- p. Serve as the Office of Primary Responsibility (OPR) for this PPMP.

7. Logistics Group (30 LG/CC) will:

- a. Assign, equip and train sufficient resources to support the implementation of this PPMP through the various squadrons and sections within the Logistics Group.
- b. 30 LSS/LGS, Supply, will:
 - (1) Manage and operate the hazardous materials pharmacy (HAZMART);
 - (2) In coordination with 30 AMDS/SGPB, ensure customers are authorized specific hazardous materials (HAZMAT), and issue such materials in quantities to reduce waste generation;
 - (3) Monitor shelf life of HAZMAT and take actions as necessary, to preclude unnecessary waste generation;
 - (4) Collect and re-issue HAZMAT, as appropriate, to preclude unnecessary waste generation; and
 - (5) Maintain records and documentation, as required, to assist with HAZMAT accounting and reporting.
- c. Contracting (30 CONS) will:
 - (1) After receiving an appropriate Statement of Work and sufficient funding from the respective Program Offices, incorporate suitable in-scope requirements into contracts for P2 activities/initiatives. **This PPMP is not to be construed as a contract directive. Contracting Officers will ensure that this PPMP is implemented through appropriate contractual documents;**
 - (2) Ensure P2 requirements such as use of recycled materials, non-use of ozone depleting chemicals, etc. are explicitly included in contracts, as directed by Federal Acquisition Requirements (See EO 12873 and SAF/AQ Policy Memorandum 93M-011, for example);

- (3) Administer and monitor the local purchase program, selecting the appropriate contract instrument that will be responsive to customers' requirements; and
- (4) Ensure all contracts for services to be performed or provided for 30th Space Wing organizations on Vandenberg AFB and the remote sites include provisions requiring the process owner to comply and report in accordance with the requirements of this PPMP. Additionally, these contracts must include the following statement: The contractor shall conduct all operations and activities with the intent of achieving the Air Force reduction goals identified in Table 2-1. Specifically, the contractor shall comply with the requirements of the Executive Orders 12856, 12873, 12902, the Pollution Prevention Act of 1990, the Clean Air Act Amendments of 1990, Emergency Planning and Right-to-Know Act (EPCRA) of 1986, the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the Resource Conservation and Recovery Act (RCRA).

8. Bioenvironmental Engineering (30 AMDS/SGPB) will:

- a. Provide assistance to 30 LSS/LGS in making decisions regarding issue exception coding (IEX) and approving IEX 9 issue requests for issue and distribution of HAZMAT;
- b. Obtain Material Safety Data Sheets (MSDSs) for those materials not previously listed in the DoD Hazardous Materials Information System. Provide copies as needed to shop personnel, Supply and Environmental Management Flight; and
- c. Provide health and toxicological interpretations of regulatory data and MSDSs to the Pollution Prevention Working Group/Opportunity Assessment Team(s), as required.

9. Commercial Operators will:

- a. Be provided with the applicable portions of this PPMP as part of their being granted approval to conduct activities on VAFB and/or the remote sites. (30 CES/CEV and 30 SW/XPR share joint responsibility for this task);
- b. Enter into the appropriate Commercialization Agreement or Contract which must include sections specifically addressing how P2 requirements for their operations on VAFB and/or the remote sites will be managed; and
- c. Include P2 as part of their activities on VAFB; however, their activities/waste reductions will not be included in the base's reporting requirements. Any federal,

state or locally mandated reporting requirements will be the responsibility of the commercial operator.

10. Pollution Prevention (P2) Working Group will:

- a. Be chaired by 30 CES/CEV, and be the focal point for VAFB's (including the remote sites) P2 activities;
- b. Be composed of permanent members from the Operations, Environmental, Logistics, Civil Engineering, Support Group, Legal, Contracting and Bioenvironmental Engineering functions. Ad hoc members will be included as decided upon by the chairperson. Ad hoc members will be assigned for specific projects or functions which require their expertise;
- c. Meet as required, but will make quarterly reports to the EPC;
- d. Establish priorities for opportunity assessments, and establish/contract for opportunity assessment team(s), as required; and
- e. Develop its own charter and agendas, but will accomplish or provide for the items listed in Table 3-2, "Responsibilities of the P2 Working Group."

11. Process Owner:

- a. A process owner is the Air Force or tenant organization responsible for directing an operator (contractor or military) that uses hazardous materials or generates hazardous waste while conducting a particular operation.

P2 WORKING GROUP

- Recommend overall installation program goals (supplement to AF goals) to the EPC
- Recommend/implement a waste tracking system
- Prioritize the waste streams, processes, or facility areas for opportunity assessments
- Select pollution prevention/opportunity assessment team(s)
- Provide training for assessment team(s)
- Establish criteria for selecting options for implementation
- Conduct (or supervise) assessments
- Conduct (or monitor) technical/economic feasibility
- Recommend options for implementation to the EPC
- Consolidate "Program" data for Management Action Plans (Project Narrative, Cost, ROI, Benefit, OPR)
- Consolidate "Execution" data for Management Action Plans (Identify implementation steps, ECDs, OPRs)
- Work with project proponents to develop funding advocacy papers
- Monitor (and/or direct) P2 implementation progress
- Monitor performance of new P2 option(s), once operational

Table 3-2, Responsibilities of the P2 Working Group

12. Opportunity Assessment Team(s) will:

- a. Be constituted/established by the P2 Working Group;.
- b. Be composed of process and P2 experts who will conduct assessments and report findings to the P2 Working Group;
- c. Conduct assessments and provide reports in the format specified by the P2 Working Group and this PPMP; and
- d. Develop and coordinate its own schedule for assessments, accomplishing, as a minimum, the items listed in Table 3-3, "Responsibilities of Opportunity Assessment Team(s)."

OPPORTUNITY ASSESSMENT TEAM(S)

- Ensure accurate baseline and assessment calculations are used for reporting and option comparisons.
- Identify pollution prevention goal requirements and quantify each option's contribution to P2 goal requirements.
- Classify options generated by assessments
- Generate recommended solutions
- Recommend options for implementation to the P2 Working Group
- Establish "Program" data for Management Action Plans (Project Narrative, Cost, ROI, Benefit, OPR) for each option/assessment
- Identify funding mechanisms for P2 Working Group's consideration
- Document and report to P2 Working Group on the performance of new option(s), once operational

Table 3-3, Responsibilities of Opportunity Assessment Team(s)

13. Unit Commanders/Contractor Managers will:

- a. Be responsible for compliance with federal, state and local laws and regulations pertaining to Pollution Prevention. All Air Force units, tenants and contractors will also comply with applicable Executive Orders, Directives and Memoranda;
- b. Ensure command management attention and support are given to the organization's P2 initiatives and goals;
- c. Be responsible for ensuring that properly trained and motivated personnel are placed in positions to conduct P2 activities for their unit/contract;
- d. Coordinate, as necessary, with the P2 Working Group to ensure compliance with P2 requirements and their ability to support the requirements of this PPMP;
- e. Prepare, as necessary, operating instructions or procedures needed for effective implementation of a P2 program within their unit/contract;
- f. Support and conduct opportunity assessments of unit/contract processes as directed by the P2 Working Group (within contract limitations);
- g. Provide reports and data as requested by the P2 Working Group; and
- h. Program and budget for resources needed to support continuing P2 requirements.